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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,867	09/25/2003	Masahiro Suzuki	145087	5798

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EXAMINER	
YOUNG, SHAWQUIA	
ART UNIT	**PAPER NUMBER**
1626	

NOTIFICATION DATE	DELIVERY MODE
05/27/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/670,867	SUZUKI, MASAHIRO	
	Examiner	Art Unit	
	SHAWQUIA YOUNG	1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 March 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3,4,9 and 11-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3, 4, 9 and 11-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 3, 4, 9 and 11-13 are currently pending in the instant application. Claims 3, 4, 9 and 11-13 are rejected in the Office Action.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 26, 2010 has been entered.

I. *Response to Arguments*

Applicants' amendment, filed February 24, 2010, has been fully considered but does not overcome the rejection of claims 3, 4, 9 and 11-13 under 35 USC 103 as being unpatentable over US patent 5,980,926 in view of US Patent No. 5,208,030. Applicants argue that the second active ingredient having coarser particles than the first active ingredient has produced unexpected results when compared with the prior art. Applicants point to Table 1 of the comparison data present which shows a difference in the residual effect between the instant invention and the prior art formulations. However, the Examiner wants to point out that the Applicants' composition was prepared differently from the prior art's composition which could be the reason for the unexpected results and not the coarseness of the particles. For example, in example 1 on page 11 of the specification, Applicants added triflumizole in the dry milling process whereas the agent triflumizole was added to the wet milling process in the comparative example. According to the comparative example, both active ingredients were add in the dry milling step whereas the instant invention added one active ingredient to the wet milling step and one active ingredient to the dry milling step. These comparative results in Applicants' specification are unrelated to the pending 103 rejection wherein the combined prior art references teach an active ingredient being added in a wet milling process and another active ingredient being added in a dry milling process and the obviousness in combining the two references to end up with Applicants claimed invention. Therefore, the comparative data present in the specification does not overcome the pending 103 rejection.

Applicants added the limitation "wherein the second active ingredient has coarser particles than the first active ingredient" to the independent claims 3, 11 and 12 overcome the 103 rejection. This limitation is similar to the limitation "wherein the each of the first and second active ingredients have two different average particle sizes" because the new limitation still relates to modifying particles sized of an obvious formulation. Therefore, the Examiner maintains the position as mentioned in the previous Office Action mailed on December 28, 2009 that in In re Rose, 105 USPQ 237 (CCPA 1955), it was well established that the selection of particle size is not a patentable modification in the absence of unobvious results. Applicants have not provided any unexpected results that were found when each of the first and second active ingredients have different average particle sizes or that the second active ingredient has coarser particles than the first active ingredient and therefore the limitation is not a patentable modification and the Examiner has maintained the 103 rejection.

II. *Rejection(s)*

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) that forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section102 of this title, if the differences between the subject matter sought to be

> patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham v. John Deere Co,, 383 U.S. 1,148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3, 4, 9 and 11-13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (USPN 5,980,926) in view of Hoy et al. (USPN 5,208,030).

Applicants are claiming a process for producing a water dispersible granule formulation comprising the steps of:

wet milling a combined mixture of a first active ingredient, a wetting and dispersing agent and water, pulverizing a combined mixture of a second active ingredient, a mineral carrier and a wetting and dispersing agent under dry milling, and admixing the mixture obtained in the wet milling step and the mixture obtained in the dry

milling step, and then drying the admixed mixture to form a homogeneous granule formulation,

wherein the first active ingredient is pulverized to an average particle size value from about 0.5 μm to about 5 μm in the step of wet milling the combined mixture,

wherein the second active ingredient is pulverized to an average particle size value from about 3 μm to about 30 μm in the step of pulverizing the combined mixture under dry milling, wherein the first active ingredient is a compound which is a solid at an ambient temperature and has a solubility in water of 1,000 ppm or less, and

wherein the first and second active ingredients are either the same or different active ingredients,

wherein the second active ingredient is an agricultural chemical selected from the group consisting of an insecticide, a fungicide and a herbicide, wherein each of the first and second active ingredients have two different average particle sizes

wherein the second active ingredient has coarser particles than the first active ingredient.

Suzuki teaches a water dispersible granule formulation and method of making thereof. Specifically, Suzuki teaches a method of making said water dispersible granule by a) admixing an active agent (e.g., triflumizole), a wetting and dispersing agent (e.g., tristyryl phenyl ether, ethylene oxide, sodium polycarboxylate), and water and subjecting the mixture to wet granulation to produce "WDG-SC" with an average particle size of 1.5

microns; b) admixing a wetting and dispersing agent (e.g., sodium alkylnaphthalenesulfonate, sodium alkylbenzenesulfonate, a formaldehyde condensate of sodium liginsulfonate), mineral carriers (e.g., diatomaceous earth and potassium chloride) and subjecting the mixture to dry milling to produce "WDG-WP"; c) mixing "WDG-SC" and "WDG-WP" and then granulating and drying the mixture (Example 1). Suzuki also teaches that "any pesticide which is in solid at an ambient temperature, is hardly-soluble in water and preferably has a solubility in water as much as 2000 pm can be used as the pesticidal component usable in the present invention without any limitation, and more than 2 pesticidal components may be used in combination" (col. 2, lines 40-45). Suzuki also teaches particular pesticides including triflumizole, thiuram, fluazinam, anilazine, captan, hexythiazox, benzoximate, tebufenpyrad, ziram, thiophanate-methyl and benzamideixime compounds represented by a general formula (1) (col. 2, lines 45-60).

With respect to the dry milling step, Suzuki is silent to a second active ingredient that is an agricultural chemical selected from the group consisting of an insecticide, fungicide or herbicide.

Hoy teaches a method of making a dosage device comprising dry milling at least one active ingredient to an average particle size of less than 5 microns. Hoy also teaches that any active ingredient may be used, especially a pesticide, such as an insecticide, herbicide, fungicide or the like (col. 1). Hoy further teaches the particular active agents, thiophanae methyl, captan, thiram, and hexythiazox (col. 1; claim 7) as well as incorporating wetting/dispersing agents and absorptive carriers such as the

particular mineral carriers, diatomaceous earth or clay (col. 2). Because both references teach products comprising various pesticides that utilize similar ingredients and include similar methods for the same purpose, it would have been obvious to one skilled in the art at the time the invention was made to include another active agent, such as a pesticide, in order to achieve the predictable result of eliminating a wider range of pests and/or fungi. Additionally, it is desirable from an economic standpoint to have one multi-purpose dosage device. Thus, in Suzuki it would have been obvious to one of ordinary skill in the art at the time the invention was made to include another active, such as a pesticide, in the dry milling step as suggested by Hoy.

Suzuki is silent to the average particle size of about 3 microns to about 30 microns of the second active agent.

Hoy teaches an active ingredient dosage device and a method of making said device (col. 1, lines 1-9). More specifically, Hoy teaches including "at least one active ingredient" and comminuting said active ingredient to an "average particle size of less than 5 microns" (col. 1, lines 10-12). Hoy also teaches "the comminution may be effected by dry milling the active ingredient, e.g. by means of micronization, to the desired particle size" (col. 1, lines 20-23). Also, Hoy teaches the active ingredient can be any suitable active ingredient (col. 1, line 36). It should be noted that Hoy's "less than 5 microns" reads on the claimed "about 3 to about 30 microns" because they are overlapping ranges. One of ordinary skill in the art would have been motivated to include a particle size of less than 5 microns because said size promotes "effective, accurate and even distribution" of the active ingredient (col. 6, line 33). A practitioner

would have reasonably expected an active ingredient with a particle size of less than 5 microns to be evenly distributed when dispersed in water. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the average particle size of about 3 microns to about 30 microns as suggested by Hoy.

Applicants have added the limitation "wherein each of the first and second active ingredients have different average particle sizes" and "wherein the second active ingredients has coarser particles than the first active ingredient" to claims 3, 11 and 12." The new limitation "wherein the second active ingredients has coarser particles than the first active ingredient" still relates to modifying particles sized of an obvious formulation. However, the Examiner wants to point out that it in In re Rose, 105 USPQ 237 (CCPA 1955), it was well established that the selection of particle size is not a patentable modification in the absence of unobvious results. Applicants have not provided any unexpected results that were found when each of the first and second active ingredients have different average particle sizes or when the second active ingredient has coarser particles than the first active ingredient" and therefore the limitation is not a patentable modification.

III. *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawquia Young whose telephone number is 571-272-9043. The examiner can normally be reached on 7:00 AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Shawquia Young/

Examiner, Art Unit 1626